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Studies in Higher Education

Report and Proposals of the 1957-58 Committee on Faculty Salaries

May 1958 No. LXXXIX

PURDUE

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DIRECTOR, DIVISION OF EDUCATIONAL REFERENCE
PURDUE UNIVERSITY
LAFAYETTE, INDIANA

Studies in Higher Education LXXXIX

Report and Proposals of the 1957-58 Committee on Faculty Salaries

Purdue Chapter of the
American Association of University Professors

Committee
Professors A. H. Blum, Child Development and Family Life; G. B Cummins, Botany and Plant Pathology; Helen Hazelton, Physical Education for Women; J. A. Huston, History, Government and Philosophy; Irving Morrissett, Economics; and Alvin R. Rolfs, English (Chairman).

May 1958

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I. SUMMARY

1. The most important question concerning higher education today is: "How can the universities attract the most able young people into the teaching profession—and keep them there?"

Universities should draw their teachers mainly from the top 10 per cent of the population in terms of ability. If they are to do so, they must be able to pay salaries high enough to compete for the top 10 per cent.

2. Faculty salaries now are not high enough to attract the best college graduates into teaching.

The *average* (not the top-notch) Purdue graduate of 1957, average age 23, received a starting salary of $5,600. The average Purdue instructor, age 33, received a salary of $5,260 last year.

The *average* Purdue student who graduated two to six years ago, who is now about 27 years old, received $6,730 last year, which is slightly more than the $6,670 received by the average assistant professor at Purdue, age 38.

The *average* Purdue engineering graduate of 12 to 16 years ago, who is now about 36 years old, received $10,070 last year, compared with a salary of $8,280 for the average associate professor, age 45, and $10,970 for the average professor, age 52.

Such salaries will not attract the *average* college graduate into teaching, much less the *superior* graduate.

3. In order to raise Purdue salaries to a level so that one-half the faculty members will receive salaries that are in the upper 10 per cent of all income-earners in the nation, an average increase of about 36 per cent in salaries is required.

To increase the *relative* attractiveness of teaching, this increase must be *in excess of* increases in general prices and average incomes. In the last ten years, prices and average income together have increased about 4 per cent a year.

The Purdue AAUP chapter proposes, as a minimum goal, that the 36 per cent increase in relative salaries be achieved during the next five biennial sessions of the legislature. On the assumption of a continued increase of 4 per cent a year in prices and average incomes, this goal will require an increase of 103 per cent in average salaries by 1969.

4. The 3 per cent of the national income now spent for education by Indiana and the U. S. is in line with the expenditures of other industrial nations. However, we are educating more people for a longer period of time than most other countries. To maintain quality as well as quantity in education, we shall have to spend more than 3 per cent of our national income for education.

A few nations have broken through the 3 per cent barrier. Japan spends about 6 per cent of its national income on education, and Russia about 10 per cent.

II. INTRODUCTION

The conclusion to be drawn from a survey of the economic status of college and university faculties throughout the United States seems unanimous and incontestable: namely, that the purchasing power of academic salaries has remained almost constant over the last 50 years, while that of income from other professions has doubled. In short, the teaching profession, which has contributed tremendously to the development of our present society, is receiving an inadequate share of the prosperity which distinguishes this society. It seems fair to say that the level of excellence of our society is in direct proportion to our academic excellence. But can academic excellence be maintained in the face of insufficient rewards for those in the profession, and unattractive inducements for those who are taking second thoughts before entering the profession?

As has been pointed out in virtually all the media of investigation and communication, the underpaid professor is in a very real sense contributing involuntarily to a kind of educational endowment or subsidy. In the words of the President's Committee on Education Beyond the High School, reported in 1957, "The plain fact is that the college teachers of the U. S., through their inadequate salaries, are subsidizing the education of students, and in some cases the luxuries of students' families, by an amount which is more than double the grand total of alumni gifts, corporate gifts, and endowment income of all colleges and universities combined." It is only a few months since Dr. C. W. Kiewet, president of the University of Rochester and also president of the

American Association of Universities, declared that faculty salaries were 27 per cent below those of 1939 in dollar value and that "the universities are financing their operations with money that represents the difference between what professors receive and what they should get." (*New York Times*, October 24, 1957.)

Another statement is that which was made in the National Education Association *Research Bulletin* for October 1956: namely, that though some really substantial salaries for straight service during the academic year may be found, "the tragedy lies in the fact that these more desirable opportunities are so few in number and that the prospect of attaining these salary levels does not compare favorably with the outlook in other occupations which demand no more by way of formal preparation."

The same sort of comment has been expressed by nationally prominent columnists in a general feeling of disbelief that the colleges and universities of our country should expect to be able to employ competent men and women to teach the youth of this country on inadequate pay. (George Sokolsky, for instance: November 14, 1956.) A Southern college president has cited the example of a statute proposing the fixing of a $25,000 minimum annual salary for highway engineers on the ground that such employees are of recognized necessity and importance. As this concerned official (Pres. Rufus Harris of Tulane University in "Providing for the Teacher," *The Tulanian*, February 1957, p. 13) asks, "Whose fault is it that the public mind will feel that highway engineers should be paid realistically 'because of their recognized public importance,' but not educational engineers?" To answer him, we must certainly agree that part of the blame, at least, is ours. Can we not heartily endorse President Harris's contention that "our educational leadership must focus in the public mind precisely the same kind of understanding of the educators' plight as seems to be applied to the problems and importance of the highway engineer?"

The need is undeniable. Our knowledge and our acknowledgment of that need are fairly comprehensive. The question is, "What can we do about it?" The data in the remainder of this report may help us formulate a proposal to pinpoint the need and to state minimum objectives for the next decade.

III. THE PROBLEM

We believe that the most important question is: "Can universities, and Purdue in particular, attract and keep the most able people?" If universities are to train young people and to conduct research which

progress requires, then they must draw their personnel from the most able groups. It is modest to suggest that professors should be drawn from the most able 10 per cent of the population. If all present university teachers were from the top 10 per cent, they would comprise only about one-thirtieth of that group.

How can the persons best suited to college teaching be identified and attracted to the profession? Our economic system does not reward persons precisely in accord with ability, but an employer who wants good people must pay good salaries. Teaching has rewards other than monetary ones—but so do other jobs. The most able people in any line of work probably enjoy their work. We conclude that if universities are to recruit personnel from the top 10 per cent of the population, they must offer commensurate salaries.

In 1957, the top 10 per cent of incomes in the U. S. were above $9,800 and the second 10 per cent were between $7,600 and $9,800. In order to attain comparable figures from Purdue salaries, we have increased ten-month salaries by 10 per cent, added them to the 12-month salaries, and tabulated them in the chart below.[1]

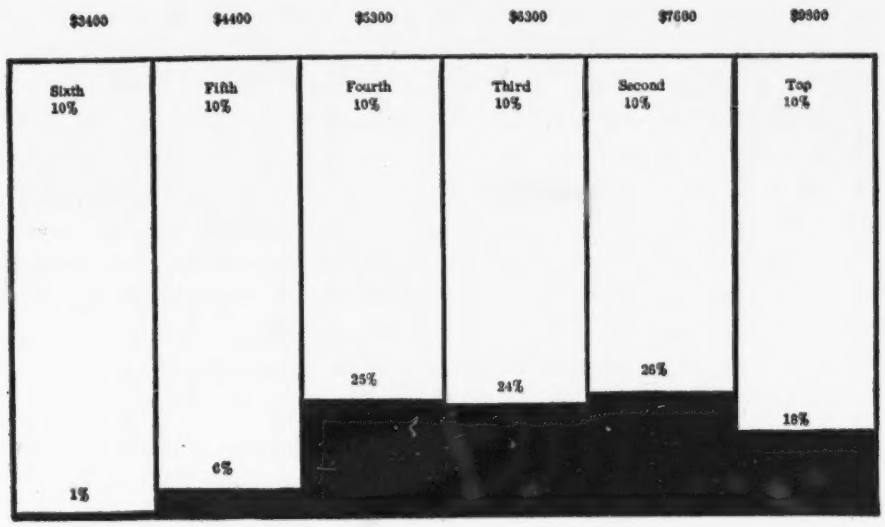

CHART I

As this chart shows, only 18 per cent of Purdue salaries are in the top 10 per cent, 26 per cent are in the second 10 per cent and the remainder are spread through the third to the sixth deciles. It would take

[1] See note at end for information on sources of data and methods of computation.

an overall increase of almost 80 per cent to put all Purdue salaries into the top 10 per cent. We suggest as an attainable goal that Purdue salaries be raised to the extent that 50 per cent of all teachers and virtually all full professors may be drawn from the top 10 per cent. This would require an average increase of 36 per cent. If this were done, Purdue salaries would compare with the national income distribution as illustrated in Chart II.

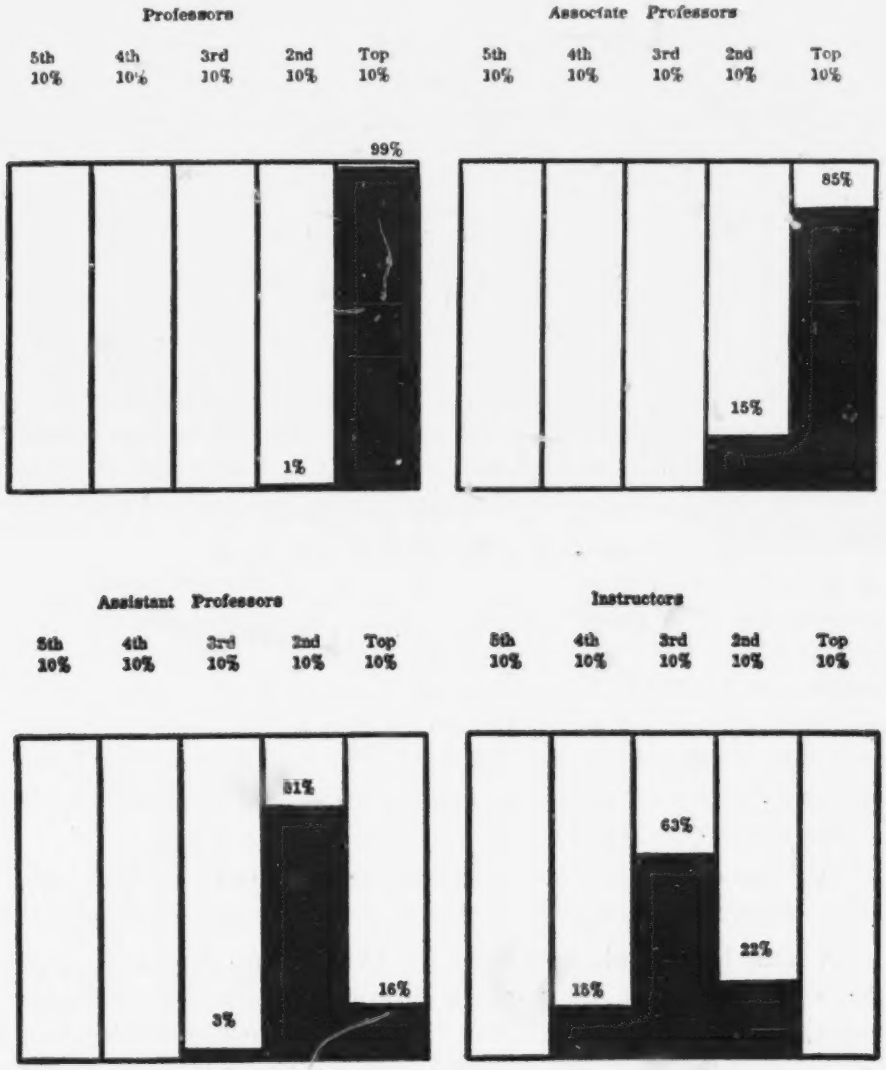

CHART II

It will be necessary to increase the size of the staff substantially during the next ten years. During this increase we hope to see the

quality of the staff *not only maintained but improved*. A long-range plan, with the goal of raising Purdue salaries toward the top of the income scale, would enhance the attractiveness of teaching and assure a flow of able young persons into the profession. Teaching salaries will be more attractive only if they are increased *relative to the income structure of the whole population*. Therefore a plan of salary advances must include, *in addition to* an increase such as the 36 per cent just suggested, increases that take account of changes in prices and changes in overall productivity of the nation. During the past ten years, both per capita real income and consumer prices have increased almost exactly 20 per cent. If these rates are maintained (and there is reason to expect that they will be), then the estimated rise in the Purdue salary scale should be comparable.

IV. PURDUE SALARIES COMPARED WITH SALARIES IN OTHER FIELDS

In considering proper salary levels, we can compare Purdue salaries with those of other specific groups as well as with the national level. Chart III shows how average Purdue salaries compared with the estimated average salaries of other groups in 1957.

Purdue graduates (average age 23) had an average starting salary of $5,600, or $340 more than the average salary of Purdue instructors (average age 33). *Business Week* magazine has reported that the average salary of ten-year college graduates (average age 35) is $9,200 for industry and $10,400 for banking. In contrast, the average assistant professor at Purdue (average age 38) receives $6,700 and the associate professor (average age 45) averages $8,200. Purdue professors (average age 52) receive slightly more than 12-to-16-year Purdue engineering graduates (average age 36).

We cannot attract *superior* students into university teaching with salary prospects substantially less than those of their *average* classmates.

A study has recently been made (by Dean George A. Hawkins) of the 47 teachers who left Purdue's Schools of Engineering to enter industry during the academic year 1955-56. The industrial salaries of two-thirds of the 47 persons exceeded their academic salaries by 50 per cent, and those of one-sixth of them were more than twice as much. Loss of trained personnel to industry is a serious problem; even more important is the problem of inducing young people to prepare for teaching. Most of the able young people are lost to teaching because they are not attracted to it in the first place.

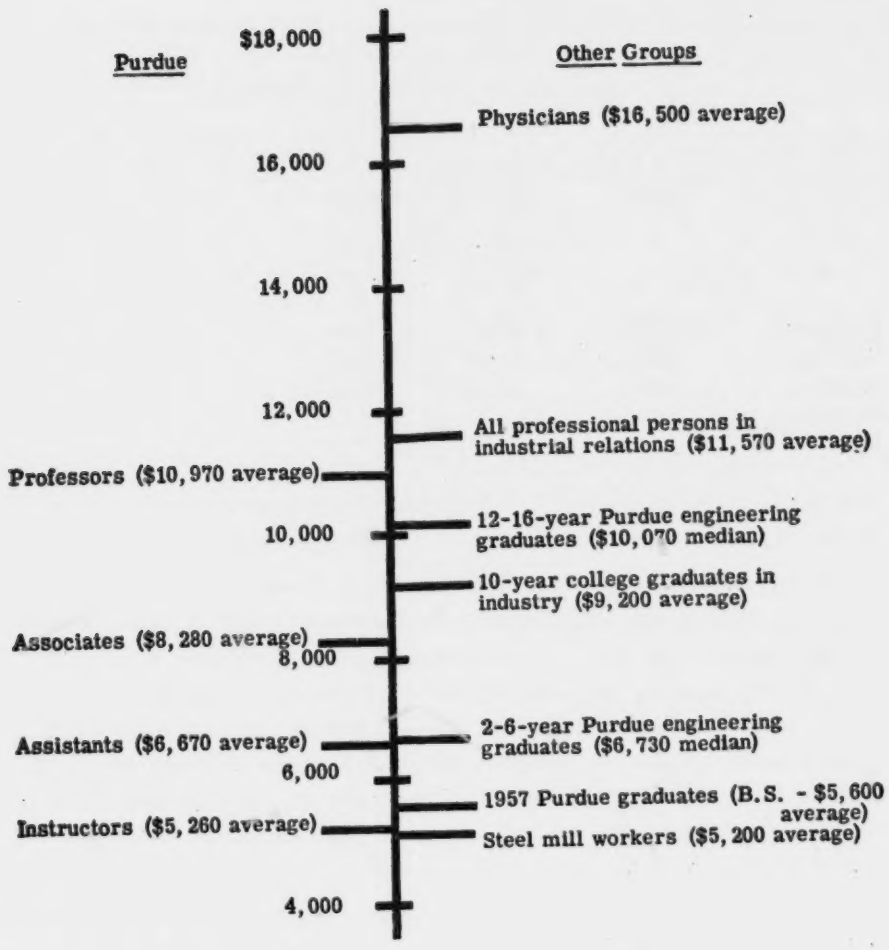

CHART III

V. PURDUE SALARIES COMPARED WITH THOSE OF OTHER UNIVERSITIES

The salary problem relates to the whole area of teaching, not just to Purdue University. There is competition between universities, and this competition is important in determining the relative excellence of universities. Purdue salaries are compared with those of other universities in Table 1.

Average salaries at Purdue are somewhat below those of comparable institutions. Some universities have faculties of law and medi-

TABLE 1

AVERAGE SALARIES AT PURDUE AND AT TWO GROUPS OF COMPARABLE UNIVERSITIES

(Ten-Month Salaries, Increased by 10 Percent)

	Purdue	Study of 5 Large State Universities in the Mid-west and Northwest		Study of 7 Big Ten Universities	
		Average of Average	Lowest Average	Average of Average	Lowest Average
Professor	$10,700	$11,690	$10,900	$11,300	$9,900
Associate	8,000	8,500	8,200	8,500	7,800
Assistant	6,500	6,900	6,700	6,900	6,500
Instructor	5,200	5,500	5,400	5,500	5,000

cine, which raise the averages, but Purdue has a low proportion of staff in liberal arts, an area where salaries tend to be lower.

A recent report of the Committee on Economic Status of the American Association of University Professors (AAUP *Bulletin*, March 1958) suggests a standard of minimum salaries for rating the adequacy of university salaries. In justifying its emphasis on minimums, the committee agrees that averages are also important and that substantial spreads within ranks are justified; but it also argues that minimum salaries are an important measure of the relative attractiveness of the teaching profession and an indication of the standards of excellence expected of each of the four ranks.

Table 2 shows the scale of minimum salaries suggested by the AAUP committee; it also shows Purdue's present position in the salary scale, and the position that would be achieved by Purdue with a 36 per cent salary increase. The suggested increase would raise Purdue from a "D" rating to a "B" rating. (There are now some universities with an "A" rating, but none with an "AA" rating.)

TABLE 2

SCALES OF MINIMUM SALARIES

Suggested by the National AAUP Committee on Economic Status

	AA	A	Purdue (36 percent added)	B	C	Purdue (present scale)	D	E	F
Professor	$14,000	$12,000	$10,900	$10,000	$8750	$8000	$7500	$6250	$5250
Associate	10,000	8,750	8,200	7,750	6750	6000	6000	5250	4500
Assistant	7,750	6,750	6,800	6,000	5250	5000	4750	4250	3750
Instructor	6,000	5,000	4,200	4,500	4000	3100	3750	3500	3250

(Note to Table 2: This comparison is on the basis of ten-month salaries, increased by 10 per cent for retirement benefits. Twelve-month salaries were reduced to a ten-month basis, then increased for retirement benefits. As suggested by the AAUP committee, the lowest 2 per cent of salaries at the professor and associate professor ranks were omitted in making the comparison.)

VI. THE DISTRIBUTION OF SALARIES BY RANK

A comparison of salaries is more meaningful if the distribution of faculty members by rank is also considered. The distribution by rank of the Purdue faculty is compared with that of other comparable universities in Table 3.

TABLE 3

PERCENTAGE DISTRIBUTION OF FACULTY BY RANK

	Purdue		54 Public Universities		18 Private Universities		5 Large State Universities in the Midwest and Northwest	
Professor	20.3	47.5	25.0	48.6	28.1	51.1	29.9	53.4
Associate	27.2		23.6		23.0		23.5	
Assistant	29.3	52.5	30.7	51.4	29.8	48.9	26.1	46.6
Instructor	23.2		20.7		19.1		20.5	

Although the number of staff members in the upper two ranks has increased from 36.3 per cent to 47.5 per cent in the last ten years, Purdue still has more teachers at the lower ranks than the other three groups shown. The contrast between Purdue and the "5 Large State Universities" group is particularly marked at the rank of full professor, where Purdue has only 20 per cent compared with 25 to 30 per cent in other universities.

TABLE 4

PROPORTIONS OF PERSONS AT EACH RANK BY SCHOOLS AT PURDUE

	Agriculture	Engineering	Science Education, and Humanities	Home Economics
Professor	27.1%	24.5%	18.5%	4.2%
Associate	31.7	26.4	27.5	16.7
Assistant	27.1	17.4	36.6	39.0
Instructor	14.1	31.7	17.4	40.1
	100.0	100.0	100.0	100.0

Table 4 shows that there are great differences between Purdue schools in the distribution by ranks. Agriculture has 27 per cent at the top rank, or near the average for other institutions, but Home Economics has only 4.2 per cent of its staff at top rank.

Wherever marked salary or rank distinctions exist between schools or departments, we urge that the administration examine the causes and correct such inequities as may involve competent members of the staffs.

VII. RECENT INCREASES IN PURDUE SALARIES

We are aware that progress has been made during the last decade. In terms of current dollars, these increases have been substantial, as shown in Table 5. Deflated for price increases, they still show an increase of 26 per cent for instructors and 51 per cent for professors. However, if allowance is made for the fact that the nation's per capita income during this period increased by 20 per cent, the margin of improvement *relative to other occupations* is much smaller, amounting to 31 per cent for professors, but only 14 per cent for associate professors and 7 per cent or less for assistant professors and instructors.

VIII. SALARY RANGES OF THE PURDUE FACULTY

Table 6 shows the approximate range from the top of the lowest 10 per cent to the bottom of the highest 10 per cent of Purdue salaries.

TABLE 5

AVERAGE INCREASES IN PURDUE SALARIES, BY RANK, 1947-48 TO 1957-58

	1947-48 Salaries		1957-58 Salaries	Per Cent Increase 1947-48 to 1957-58	
	in 1947 Dollars	in 1958 Dollars		in 1947 Dollars	in 1958 Dollars
Professor	$5,900	$7,250	$10,970	86	51
Associate	5,030	6,180	8,280	66	34
Assistant	4,270	5,250	6,670	56	27
Instructor	3,400	4,180	5,260	54	26

TABLE 6

APPROXIMATE RANGE FROM THE TOP OF THE LOWEST 10 PER CENT TO THE BOTTOM OF THE HIGHEST 10 PER CENT, PURDUE, 1957-58

Professor	$9,300	—	$13,200
Associate	7,000	—	9,600
Assistant	5,800	—	7,700
Instructor	4,500	—	6,000

Taking into account the many factors that influence the determination of salaries, we feel that a moderately large range of salaries within the ranks is justified. The differentials between ranks are similar to those of comparable universities. There is no basis for asserting that these differentials are exactly what they should be, but we approve the increase in differentials that has occurred in the last decade (shown in Table 7) and recommend that differentials of at least this magnitude be maintained.

TABLE 7

RATIO OF AVERAGE SALARIES TO AVERAGE INSTRUCTORS' SALARIES AT PURDUE

	1947-48	1957-58
Professor	1.74	2.08
Associate	1.49	1.57
Assistant	1.26	1.27
Instructor	1.00	1.00

IX. AVERAGE SALARIES BY SCHOOLS

Average salaries by rank and by school are shown in Table 8. As with the distribution by ranks (Table 3), there are some substantial differences between schools, some of which may represent inequities.

TABLE 8

AVERAGE SALARIES BY RANK AND SCHOOL, PURDUE, 1957-58

	Agriculture	Engineering	Science, Education, and Humanities	Home Economics
Professor	$9,990	$10,960	$11,145	$8,635
Associate	8,021	8,327	8,205	7,003
Assistant	7,013	6,927	6,563	6,270
Instructor	5,194	5,232	5,182	5,295

The salaries of instructors and assistant professors are comparable in all schools. Averages for assistant professors are somewhat lower in the Science and Home Economics schools than in Agriculture and Engineering. For associate professors, salaries are comparable in three schools but substantially lower in Home Economics. Professors' salaries

are substantially higher in Engineering and Science than in Agriculture and Home Economics. The higher salaries of full professors in Engineering and Science probably reflect more vigorous competition, and if this is so, we recognize the necessity of the differentials. However, we feel obliged to urge again that large differences be scrutinized by the administration and the schools, and be adjusted to the end that really competent faculty members, regardless of their sex or their professional area, be accorded appropriate rank and salary.

X. CAN WE AFFORD GOOD EDUCATION?

Americans believe in education, as evidenced by the high proportion of children who complete high school and the increasing number who attend college and graduate school. But while expecting teachers—and particularly college and university teachers—to be persons of outstanding abilities and accomplishments, Americans seem to expect them to have less interest in monetary rewards than do their friends in industry and the students whom they train for industry. If we wish to maintain *and improve* the quality of education as the number of students in the universities doubles in the next decade or so, the tradition of low pay for teachers must be abandoned.

During the last decade, appropriations by the state for Purdue have more than tripled. At the same time, receipts from the state gross income tax, the major source of funds for the State General Fund and for the universities, have also tripled. Throughout this period appropriations for Purdue amounted to about 11 per cent of gross income tax receipts. A similar increase in income tax receipts and in appropriations for Purdue in the next decade would permit the absorption of the expected increase in enrollment, an adequate building program, and substantial salary increases, even with a modest amount of inflation. But such an increase in tax receipts is not likely, and other sources of funds may have to be found.

While we recognize the difficulties of obtaining funds for paying salaries adequate to attract the most able people into university teaching, we feel strongly that a greater effort to make the most of our intellectual resources is of the utmost importance. The United States spends about 3 per cent of its income for education and this percentage is comparable to that of most of the advanced nations of the world. However, few if any countries educate as many of their young people for as long a period as we do—and this is particularly true on the university level. If we are educating proportionately *more* people at the *same* relative cost as other countries, then it appears that we must be sacrificing quality

for quantity. If we want quality and quantity both, we shall have to pay for them.

Since our per capita income is much higher than that of most other countries, it might be argued that 3 per cent of our income will buy more and better education than will 3 per cent of the income of another nation. For the major part of educational expenses—the salaries of teachers—*this is not true*. Three per cent of the U. S. national income will buy about six pairs of shoes a year for every American, while 3 per cent of the French national income buys only two pairs for every Frenchman. But 3 per cent of the national income will not hire more or better teachers in America than it will in France. The attraction of a profession for an individual depends largely on the rewards of that profession relative to the rewards of other professions *in the same country*. The fact that poorly paid teachers in the U. S. have a higher standard of living than well-paid teachers in France does not attract people to the teaching profession in the U. S.

Although most of the advanced industrial nations spend about the same proportion of their income for education as the U. S., there are at least two nations that stand out for their belief in paying the price of good education. These are Japan, which spends about 6 per cent of its income for education, and Russia, which spends about 10 per cent of its income for education.

XI. OBJECTIVES

We propose as an attainable goal that Purdue salaries be raised to levels such that 50 per cent of the entire faculty and virtually all full professors would fall in the top 10 per cent of incomes in the United States.

To that end, we propose an 11-year program, continuing through the next five biennial sessions of the legislature, aimed at achieving by 1969 the salary levels shown in Chart II. This will require that salaries be increased 103 per cent during the next 11 years, assuming continued price increases, or an annual increase of 7 per cent (compounded) during the next 11 years. If prices remain stable, the program would call for a total increase of 66 per cent, or 5 per cent annually (compounded).

XII. PROPOSED PLAN OF ACTION

1. This report is to be distributed to all members of the local AAUP chapter and, if possible, to all Purdue faculty members. This distribution should aid the faculty in its efforts to better acquaint the

public and our legislators with the need and importance of better education in our nation and the accompanying necessity for paying for such education.

2. This report is to be presented to the University administration for possible adoption of any appropriate portions in the administration's continuing efforts to increase the quality of education at Purdue.

3. With this report as a framework, the committee will consult with the University administration as to how the AAUP in particular, and the faculty in general, can help to carry the story about the needs of Indiana colleges and universities to the public and to the legislators in our state.

XIII. NOTE ON SOURCES OF DATA AND METHODS OF COMPUTATION

Throughout the report, ten-month salaries have been combined with 12-month salaries by adding 10 per cent to the ten-month salaries. Some Purdue faculty members on ten-month appointment teach in the summer and receive an additional 20 per cent; others have no additional earnings. The 10 per cent addition is a compromise.

All figures on salaries and ranks pertain only to the *campus instructional staff*. Heads of departments are omitted, as are administrative and research personnel. If an individual has both instructional and non-instructional duties, only that part of his salary that is charged to instruction enters into this report.

The data on "5 Large State Universities" shown in Tables 1 and 3 are from the December 1957 *AAUP Bulletin*. The minimum recommended salaries of Table 2 are from the March 1958 *AAUP Bulletin*. The data on "54 Public" and "18 Private" universities in Table 3 are from the U. S. Department of Health, Education, and Welfare, Office of Education, *Higher Education Planning and Management Data*, 1957-58.

The data and calculations concerning Purdue salaries are based on data supplied by Pres. Frederick Hovde's office.

Purdue

STUDIES IN HIGHER EDUCATION

1. McClusky, F. Dean. The Purpose and Function of the Division of Educational Reference ---------- $0.10
2. Hatt, Elise, and McClusky, F. Dean. A Study of Enrollment-------- .10
3. ~~Not assigned.~~
4. Hatt, Elise, and McClusky, F. Dean. A Comparative Study of Two Methods of Defining Scholastic Failure in a University (out of print).
5. Creek, Herbert LeSourd, and McKee, James Hugh. The Preparation in English of Purdue Freshmen (out of print).
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The University began its work in 1874, and derives its name from John Purdue, whose generous contributions resulted in the location of the institution in Lafayette.

The University offers graduate and undergraduate instruction through the Schools of Agriculture, Engineering (Aeronautical, Agricultural, Chemical and Metallurgical, Civil, Electrical, Industrial, Engineering Science, Mechanical); Home Economics; Pharmacy; Science, Education, and Humanities; Industrial Management; and Veterinary Science and Medicine.

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